Classes of Nickel Alloys

200 – solid solution, 99.5% nickel

300 – precipitation hardenable (heat treatment), copper alloys

400 – solid solution, high strength, high toughness, corrosion resistance. Ni, Cu, Fe, Mn

500 – copper precipitation hardenable, high strength corrosion resistance. Al, Ti

600 – solid solution, high temperature corrosion resistance, weldability. Ni, Cr, Mo, Cb, Fe

700 – precipitation hardenable, strength, weldability. Ni, Cr, Fe, Ti, Cb

800 – solid solution, high temp, oxidation resistance. Ni, Cr, Fe, Mo, Cu, Ti

900 – precipitation hardenable, does not weld. Ni, Fe, Cr, Mo

Hastelloy – 16-28% Mo acid corrosion resistance

<http://www.weldreality.com/STEELS%20NICKEL%20ALLOYS.htm>